

**SYSTEM AND METHOD FOR DISTRIBUTION OF A DATA STREAM FROM
HIGH-TO-LOW-TO-HIGH BANDWIDTH LINKS**

ABSTRACT

A system and method are provided for identifying an error condition and the sequence of a high bandwidth data stream that is split among low bandwidth links. The system includes a first unit coupled to links for inverse multiplexing a data stream into frames that are transmitted over at least two links and a second unit at the second location coupled to the other end of the links for receiving the frames and multiplexing the frames to produce the cell stream, wherein the first unit inserts at least one detection cell into each frame prior to transmission and the second unit analyzes the detection cell to determine if an error condition exists. The method includes establishing a size for a detection cell and a frequency of insertion into the data stream, determining a known signal that will be part of the detection cell, inserting the detection cell into the data stream, and analyzing the received detection cell at the second unit to determine if an error condition exists.